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EXAMINER

VIZVARY, GERALD C

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/777,219	Applicant(s) WINBOM, HAKAN	
	Examiner GERALD C. VIZVARY	Art Unit 3696	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 June 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. In the amendment filed 6/24/2008, the following has occurred: claims 1-7, 12 & 20-22 have been amended. Now, claims 1-22 are presented for examination.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ferstenberg 5,873,071 in view of Wang 6,578,970.

As per claim 1 (currently amended), Ferstenberg 5,873,071 teaches a method for trading in securities, the trading being carried out at a primary site according to information received from market makers and traders, said information comprising quotes and orders for one or more ~~instrument~~, instruments the method comprising: receiving the reception and storing of said information at the primary site~~[[,]]~~; and using said information to create deals in said securities, said deals also being stored at the primary site~~[[,]]~~ ("repeating the previous two steps in order, each ordered repetition being a round of an electronic negotiation, until the e-agent programs accept all the amounts of commodities offered, the accepted amounts being final commodity amounts;

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and sending results electronic messages to computers of the participants, the results messages including digital data representing the final commodity amounts.”

Ferstenberg 5,873,071 col. 10 lines 2-8);

Ferstenberg 5,873,071 fails to explicitly teach storing at the method additionally comprising the use of a secondary site[[,]] ~~at which secondary site~~ replicas of the orders and deals ~~are stored~~[[,]]; and

~~with using~~ the deals stored at the secondary site ~~being used by a corrective function to~~ update the orders stored at the secondary site.

Wang 6,578,970 B1 teaches “In another embodiment, this replication of data is performed by splitting off a mirrored copy of each volume of data of the primary host computer 110 that is mirrored to a corresponding volume of data that is accessible to the secondary host computer 120.” (Wang 6,578,970 B1 col. 9 lines 49-54) and “In one embodiment of the present invention, these renewable host resources are provided in the form of a secondary or failover host computer that can be automatically configured and brought on line to replace a failing primary host computer.” (Wang 6,578,970 B1 col. 5 lines 28-32)

As per claim 2 (currently amended), Ferstenberg 5,873,071 teaches a method of claim 1.

Ferstenberg 5,873,071 fails to explicitly teach that the replicas of the orders and deals stored at the secondary site are forwarded from the primary site, at which primary site

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the information on which the replicas of the order and deals are based is first received from the market makers and traders.

Wang 6,578,970 B1 teaches "In another embodiment, this replication of data is performed by splitting off a mirrored copy of each volume of data of the primary host computer 110 that is mirrored to a corresponding volume of data that is accessible to the secondary host computer 120." Wang 6,578,970 B1 col. 9 lines 49-54)

As per claim 3 (currently amended), Ferstenberg 5,873,071 teaches a method of claim 1.

according to which the replicas of the orders and deals stored at the secondary site are based on information received at the secondary site directly from the market makers and traders.

Ferstenberg 5,873,071 fails to teach that the replicas of the orders and deals are stored at the secondary site.

Wang 6,578,970 B1 teaches "In another embodiment, this replication of data is performed by splitting off a mirrored copy of each volume of data of the primary host computer 110 that is mirrored to a corresponding volume of data that is accessible to the secondary host computer 120." (Wang 6,578,970 B1 col. 9 lines 49-54)

As per claim 4 (currently amended), Ferstenberg 5,873,071 teaches an automated system for trading in securities, said system comprising[[,]] at a primary site:

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~~Automated means for receiving~~ a primary site including a primary site computer programmed to:

receive information from market makers and traders, said information comprising quotes and orders for at least one instrument ("Preferably, participants access this system for submitting exchange orders and receiving exchange responses over network connections." Ferstenberg 5,873,071 col. 3 lines 58-60),

~~Automated means for storing~~ store said information in memory at the primary site ("In another aspect of the first embodiment, the electronic memory associated with the intermediary program further stores digital data representing a selected round of the electronic negotiation." Ferstenberg 5,873,071 col. 4 lines 58-65),

~~Automated means for creating~~ create deals using said received information~~[[,]]~~ and ~~automated means for storing~~ store said deals in the memory at the primary site ("repeating the previous two steps in order, each ordered repetition being a round of an electronic negotiation, until the e-agent programs accept all the amounts of commodities offered, the accepted amounts being final commodity amounts; and sending results electronic messages to computers of the participants, the results messages including digital data representing the final commodity amounts." Ferstenberg 5,873,071 col. 10 lines 2-8), and

Ferstenberg 5,873,071 fails to teach ~~the system additionally comprising a secondary site[[,]] at which the system comprises including a secondary site computer~~ programmed to:

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~~automated means for storing~~ store replicas of the orders received and the deals created at the primary site in memory at the secondary site, and

~~automated means for a corrective function for using~~ use the deals stored at the secondary site to update the orders stored in the memory at the secondary site.

Wang 6,578,970 B1 teaches "In another embodiment, this replication of data is performed by splitting off a mirrored copy of each volume of data of the primary host computer 110 that is mirrored to a corresponding volume of data that is accessible to the secondary host computer 120." (Wang 6,578,970 B1 col. 9 lines 49-54) and "The replicated data may also be periodically updated, prior to a detected malfunction or failure of the primary host computer 110, to reflect any changes made to the data of the primary host computer 110 during operation." Wang 6,578,970 B1 col. 10 lines 58-63)

As per claim 5 (currently amended), Ferstenberg 5,873,071 teaches a system of claim 4.

Ferstenberg 5,873,071 fails to teach additionally comprising ~~automated means~~ for transmitting from the primary site to the secondary site the information on which the replicas at the secondary site are based.

Wang 6,578,970 B1 teaches "The computer system of claim 31 further comprising: a network director, coupled to the first host computer and the controller, that redirects, in response to an instruction from the controller, communications sent to a network address of the first host computer to a network address of the second host computer."

Wang 6,578,970 B1 claim 32)

As per claim 6 (currently amended), Ferstenberg 5,873,071 teaches a system of claim 4.

Ferstenberg 5,873,071 fails to teach additionally comprising ~~automated~~ means at the secondary site for receiving information directly from the market makers and traders on which the replicas stored in the memory at the secondary site are based.

Wang 6,578,970 B1 teaches "After replicating the data of the primary host computer 110, the routine proceeds to step 240, wherein the site failover routine powers on the secondary host computer 120 and brings the secondary host computer 120 on line as an identical replacement to the primary host computer 110. Wang 6,578,970 B1 col. 9 lines 55-19)

As per claim 7 (currently amended), Ferstenberg 5,873,071 teaches a method for use in the automated trading of securities, the trading being carried out at a primary site according to information received from market makers and traders, said information comprising quotes and orders for one or more instrument, the method comprising:
~~the reception~~ receiving and storing of said information at the primary site; ~~and~~
using said information to create deals in said securities, said deals being stored at the primary site~~[[,]]~~ ("Preferably, participants access this system for submitting exchange orders and receiving exchange responses over network connections." Ferstenberg 5,873,071 col. 3 lines 58-60);

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Ferstenberg 5,873,071 fails to teach ~~the method additionally comprising the use of a secondary site, at which~~ storing at a secondary site replicas of the orders and ~~deals are stored~~[,]; and

~~with a~~ corrective function using the deals stored at the secondary site ~~being used by a corrective function~~ to update the orders stored at the secondary site,

~~according to which method the~~ wherein trading of securities is continued at the secondary site in case of a malfunction at the primary site, in which case the market makers and traders are prompted to submit new quotes to the secondary site. ("In one embodiment of the present invention, these renewable host resources are provided in the form of a secondary or failover host computer that can be automatically configured and brought on line to replace a failing primary host computer." (Wang 6,578,970 B1 col. 2 lines 21-26)

Wang 6,578,970 B1 teaches "In another embodiment, this replication of data is performed by splitting off a mirrored copy of each volume of data of the primary host computer 110 that is mirrored to a corresponding volume of data that is accessible to the secondary host computer 120." (Wang 6,578,970 B1 col. 9 lines 49-54)

"The replicated data may also be periodically updated, prior to a detected malfunction or failure of the primary host computer 110, to reflect any changes made to the data of the primary host computer 110 during operation." (Wang 6,578,970 B1 col. 10 lines 58-63)

"In this embodiment, when a status report has not been received by the controller 160 at an expected interval, the controller 160 assumes that the primary host computer 110

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has failed and responds appropriately. As previously described, when a failure is detected by the controller 160, the controller 160 may shut down the primary host computer 110 and configure the secondary host computer 120 to act in its stead.” (Wang 6,578,970 B1 col. 8 lines 8-14)

As per claim 8 (original), Ferstenberg 5,873,071 discloses a method of claim 7. Ferstenberg 5,873,071 fails to explicitly teach an automated function at the secondary site makes the determination that there has been a malfunction at the primary site, and that the trading should be continued at the secondary site

Wang 6,578,970 B1 teaches “In this embodiment, when a status report has not been received by the controller 160 at an expected interval, the controller 160 assumes that the primary host computer 110 has failed and responds appropriately. As previously described, when a failure is detected by the controller 160, the controller 160 may shut down the primary host computer 110 and configure the secondary host computer 120 to act in its stead.” (Wang 6,578,970 B1 col. 8 lines 8-14)

As per claim 9 (original), Ferstenberg 5,873,071 discloses a method of claim 7. Ferstenberg 5,873,071 fails to explicitly teach an operator makes the determination that there has been a malfunction at the primary site, and that the trading should be continued at the secondary site.

Wang 6,578,970 B1 teaches “For example, rather than utilizing relays 170 and 171 to automatically power-off the primary host computer 110 and automatically power-on the

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secondary host computer 120, one or more of these steps may be performed manually.”
(Wang 6,578,970 B1 col. 10, lines 42-46)

As per claim 10 (original), Ferstenberg 5,873,071 discloses a method of claim 7. according to which the replicas stored at the secondary site are forwarded from the primary site, at which primary site the information on which the replicas are based is first received from the market makers and traders. (“In the preferred application of this invention to exchanges of financial commodities, and similarly for other fungible commodities, it is desirable that commodities be allocated such that the total amount of commodities exchanged is substantially maximized. Therefore, the electronic intermediaries of the preferred embodiment, to which the remainder of this description is generally directed, attempts to fairly allocate the maximum amounts of commodities. Ferstenberg 5,873,071 col. 15 lines 14-22)

Ferstenberg 5,873,071 fails to teach the replicas stored at the secondary site are forwarded from the primary site.

Wang 6,578,970 B1 teaches “In another embodiment, this replication of data is performed by splitting off a mirrored copy of each volume of data of the primary host computer 110 that is mirrored to a corresponding volume of data that is accessible to the secondary host computer 120.” (Wang 6,578,970 B1 col. 9 lines 49-54)

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As per claim 11 (original), Ferstenberg 5,873,071 discloses a method of claim 7. according to which the replicas stored at the secondary site are based on information received at the secondary site directly from the market makers and traders.

Ferstenberg 5,873,071 fails to teach that the replicas stored at the secondary site are based on information received at the secondary site directly from the market makers and traders.

Wang 6,578,970 B1 teaches "In another embodiment, this replication of data is performed by splitting off a mirrored copy of each volume of data of the primary host computer 110 that is mirrored to a corresponding volume of data that is accessible to the secondary host computer 120." Wang 6,578,970 B1 col. 9 lines 49-54)

As per claim 12 (currently amended), Ferstenberg 5,873,071 discloses an automated system for trading in securities, said system comprising ~~at a primary site:~~

a primary site including:

~~Automated~~ automated means for receiving information from market makers and traders, said information comprising quotes and orders for at least one instrument ("In the preferred application of this invention to exchanges of financial commodities, and similarly for other fungible commodities, it is desirable that commodities be allocated such that the total amount of commodities exchanged is substantially maximized. Therefore, the electronic intermediaries of the preferred embodiment, to which the remainder of this description is generally directed, attempts to fairly allocate the maximum amounts of commodities. Ferstenberg 5,873,071 col. 15 lines 14-22),

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~~Automated~~ automated means for storing said information at the primary site (“In another aspect of the first embodiment, the electronic memory associated with the intermediary program further stores digital data representing a selected round of the electronic negotiation.” Ferstenberg 5,873,071 col. 4 lines 58-65),

~~Automated~~ automated means for creating deals using said received information, and automated means for storing said deals at the primary site (“In another aspect of the first embodiment, the electronic memory associated with the intermediary program further stores digital data representing a selected round of the electronic negotiation.” Ferstenberg 5,873,071 col. 4 lines 58-65),

Ferstenberg 5,873,071 fails to teach ~~the system additionally comprising a secondary site[[,]] at which the system comprises~~ including:

automated means for storing replicas of the orders received and the deals created at the primary site,

automated means for a corrective function for using the deals stored at the secondary site to update the orders stored at the secondary site, and

automated means for determining that there has been a malfunction at the primary site such that the trading should be continued at the secondary site.

Wang 6,578,970 B1 teaches “In another embodiment, this replication of data is performed by splitting off a mirrored copy of each volume of data of the primary host computer 110 that is mirrored to a corresponding volume of data that is accessible to the secondary host computer 120.” (Wang 6,578,970 B1 col. 9 lines 49-54), “The replicated data may also be periodically updated, prior to a detected malfunction or

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failure of the primary host computer 110, to reflect any changes made to the data of the primary host computer 110 during operation.” (Wang 6,578,970 B1 col. 10 lines 58-63) and “In this embodiment, when a status report has not been received by the controller 160 at an expected interval, the controller 160 assumes that the primary host computer 110 has failed and responds appropriately. As previously described, when a failure is detected by the controller 160, the controller 160 may shut down the primary host computer 110 and configure the secondary host computer 120 to act in its stead.” Wang 6,578,970 B1 col. 8 lines 8-14)

As per claim 13 (original), Ferstenberg 5,873,071 discloses a system of claim 12. Ferstenberg 5,873,071 fails to explicitly teach additionally comprising an automated function for prompting the market makers and traders to submit new quotes to the secondary site.

Wang 6,578,970 B1 teaches “After replicating the data of the primary host computer 110, the routine proceeds to step 240, wherein the site failover routine powers on the secondary host computer 120 and brings the secondary host computer 120 on line as an identical replacement to the primary host computer 110.” Wang 6,578,970 B1 col. 9 lines 55-59)

As per claim 14 (previously presented), Ferstenberg 5,873,071 discloses a system of claim 12.

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Ferstenberg 5,873,071 fails to explicitly teach additionally comprising automated means for transmitting from the primary site to the secondary site the information on which the replicas at the secondary site are based.

Wang 6,578,970 B1 teaches “The computer system of claim 31 further comprising: a network director, coupled to the first host computer and the controller, that redirects, in response to an instruction from the controller, communications sent to a network address of the first host computer to a network address of the second host computer.”

Wang 6,578,970 B1 claim 32)

As per claim 15 (previously presented), Ferstenberg 5,873,071 discloses a system of claim 12. system of claim 12,

Ferstenberg 5,873,071 fails to explicitly teach additionally comprising automated means at the secondary site for receiving information directly from the market makers and traders on which the replicas stored at the secondary site are based.

Wang 6,578,970 B1 teaches “After replicating the data of the primary host computer 110, the routine proceeds to step 240, wherein the site failover routine powers on the secondary host computer 120 and brings the secondary host computer 120 on line as an identical replacement to the primary host computer 110. Wang 6,578,970 B1 col. 9 lines 55-19)

As per claim 16 (original), Ferstenberg 5,873,071 discloses an automated corrective method for use in an automated system for trading in securities (“However, in the case

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of financial commodities, currently available are "quote feeds," which either broadcast all quotes/trades of financial commodity prices or are capable of responding to a price query only for one commodity at a time." Ferstenberg 5,873,071 col. 44 lines 38-42), Ferstenberg 5,873,071 fails to teach that the system information regarding orders and deals from a primary trading site is passed to and stored at a secondary site, and said corrective method using the deal information passed to the secondary site to update the order information stored at the secondary site.

Wang 6,578,970 B1 teaches "In one embodiment, the data that is replicated at step 230 includes the operating system, as well as any application programs and application program data of the primary host computer 110. In this embodiment, each volume of data of the primary host computer 110 is copied to a corresponding volume of data on a storage device 135 that can be accessed by the secondary host computer 120 (e.g., a storage device 135 that can be accessed via port adapter 132B)." (Wang 6,578,970 B1 col. 9 lines 41-49) and ("The replicated data may also be periodically updated, prior to a detected malfunction or failure of the primary host computer 110, to reflect any changes made to the data of the primary host computer 110 during operation." Wang 6,578,970 B1 col. 10 lines 58-63)

As per claim 17 (original), Ferstenberg 5,873,071 discloses an automated corrective method of claim 16.

said method being used to monitor the information regarding deals stored at the secondary site in order to update the information regarding orders ("repeating the

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previous two steps in order, each ordered repetition being a round of an electronic negotiation, until the e-agent programs accept all the amounts of commodities offered, the accepted amounts being final commodity amounts; and sending results electronic messages to computers of the participants, the results messages including digital data representing the final commodity amounts.” Ferstenberg 5,873,071 col. 10 lines 2-8)

Ferstenberg 5,873,071 fails to teach storing at the secondary site.

Wang 6,578,970 B1 teaches “The replicated data may also be periodically updated, prior to a detected malfunction or failure of the primary host computer 110, to reflect any changes made to the data of the primary host computer 110 during operation.” (Wang 6,578,970 B1 col. 10 lines 58-63)

As per claim 18 (original), Ferstenberg 5,873,071 discloses an automated corrective method of claim 16.

Ferstenberg 5,873,071 fails to teach order information passed to the secondary site is passed via the deal information stored at the secondary site.

Wang 6,578,970 B1 teaches “In one embodiment, the data that is replicated at step 230 includes the operating system, as well as any application programs and application program data of the primary host computer 110. In this embodiment, each volume of data of the primary host computer 110 is copied to a corresponding volume of data on a storage device 135 that can be accessed by the secondary host computer 120 (e.g., a storage device 135 that can be accessed via port adapter 132B).” Wang 6,578,970 B1 col. 9 lines 41-49)

As per claim 19 (original), Ferstenberg 5,873,071 discloses an automated corrective method of claim 16. ("E-agents 1 evaluate offers from the intermediary and generate counter-offers to the intermediary in order to arrive at an exchange of the commodities consistently with the participant's objective. In the preferred embodiment the intermediated exchanges occur periodically, e.g., preferably every 90 minutes. Ferstenberg 5,873,071 col. 14 lines 31-36)

Ferstenberg 5,873,071 fails to explicitly teach that copies of the orders and deals are stored at the secondary site, and at defined intervals said orders are gone through against the background of said deals.

Wang 6,578,970 B1 teaches "The replicated data may also be periodically updated, prior to a detected malfunction or failure of the primary host computer 110, to reflect any changes made to the data of the primary host computer 110 during operation." (Wang 6,578,970 B1 col. 10 lines 58-63)

As per claim 20 (currently amended), Ferstenberg 5,873,071 discloses ~~An automated corrective means~~ A computer for use in an automated system for trading in securities, in which system information regarding orders and deals from a primary trading site is passed to and stored at a secondary site ("E-agents 1 evaluates offers from the intermediary and generate counter-offers to the intermediary in order to arrive at an exchange of the commodities consistently with the participant's objective. In the

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preferred embodiment the intermediated exchanges occur periodically, e.g., preferably every 90 minutes. Ferstenberg 5,873,071 col. 14 lines 31-36),

Ferstenberg 5,873,071 fails to explicitly teach ~~said corrective means~~ wherein the computer is configured to use the deal information passed to the secondary site to update the order information stored at the secondary site.

Wang 6,578,970 B1 teaches "For example, referring to FIG. 1, the controller 160 can instruct the storage processor 133 to modify the assignment of those storage devices 135 assigned to port adapter 132A so that they are instead assigned to port adapter 132B. With this modification, no data replication is required, and the secondary host computer 120 can directly access the data of the primary host computer 110." Wang 6,578,970 B1 col. 12 lines 3-10)

As per claim 21 (currently amended), Ferstenberg 5,873,071 discloses a ~~automated corrective means~~ computer of claim 20[[],].

Ferstenberg 5,873,071 fails to teach ~~said means monitoring~~ further configured to monitor the information regarding deals stored at the secondary site in order to update the information regarding orders stored at the secondary site.

Wang 6,578,970 B1 teaches "Thus, according to another aspect of the present invention, a controller is provided that is capable of dynamically configuring another host computer to provide additional computer resources that complement those provided by a primary host computer. In one embodiment, the controller monitors the performance of a primary host computer, and when the controller detects that the performance of the

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primary host computer is deficient or below a predetermined threshold, the controller automatically configures additional host resources to share in the operational load of the primary host computer.” Wang 6,578,970 B1 col. 32 lines 40-50)

As per claim 22 (currently amended), Ferstenberg 5,873,071 discloses a ~~automated corrective means~~ computer of claim 20.

Ferstenberg 5,873,071 fails to teach that the order information ~~which is passed~~ provided to the secondary site ~~pass~~ via the deal information stored at the secondary site.

Wang 6,578,970 B1 teaches “In one embodiment, the data that is replicated at step 230 includes the operating system, as well as any application programs and application program data of the primary host computer 110. In this embodiment, each volume of data of the primary host computer 110 is copied to a corresponding volume of data on a storage device 135 that can be accessed by the secondary host computer 120 (e.g., a storage device 135 that can be accessed via port adapter 132B).” Wang 6,578,970 B1 col. 9 lines 41-49)

As per claim 23 (currently amended), Ferstenberg 5,873,071 discloses a ~~automated corrective means~~ computer of claim 20[[],].

Ferstenberg 5,873,071 fails to teach ~~which stores~~ configured to store copies of the orders and deals at the secondary site, and at defined intervals, ~~goes through said~~ check the orders against the background of ~~said~~ the deals.

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Wang 6,578,970 B1 teaches "The replicated data may also be periodically updated, prior to a detected malfunction or failure of the primary host computer 110, to reflect any changes made to the data of the primary host computer 110 during operation." Wang 6,578,970 B1 col. 10 lines 58-63)

It would have been obvious to one of ordinary skill in the art at the time of the invention to include mirroring data for storage and processing at a secondary site as taught by Wang 6,578,970 B1 in the intelligent system of commodities exchange of Ferstenberg 5,873,071, since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

Response to Arguments

4. In the remarks filed on 6/24/2008, Applicant argues that

(1) Wang does not describe any intelligent selection and transfer of a particular subset of data to the secondary site in combination with using that subset of data to update a larger data set in order to save bandwidth and hardware resources.

(2) There is no teaching or suggestion of transferring to and storing at the secondary site replicas of the orders and deals at the primary site, but not quote information, and then using the deal information to update orders at the secondary site.

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In response to (1) Ferstenberg recites "The preferred protocol is accompanied by heuristic rules for determining the demands or bounds, d_n . These heuristic rules preferably balance several competing requirements, including requirements for rapid and efficient convergence of the protocol to a final exchange, requirements to substantially maximize the total amounts of commodity exchanged, and requirements for overall fairness of the exchange. To insure convergence of the negotiation, it suffices that, for every round beyond some point in the negotiation, there is at least one commodity for which the new demand, d_n , is less than the previous demand, d_{n-2} for that commodity. In other words, preferably, there is some negotiation stage, denoted by N , such that for all rounds, n , of the negotiation beyond N , $n > N$, there is at least one commodity for which the following equation is true.

$$(7) \quad d_n(\dots, n, \dots) < d_{n-2}(\dots, n-2, \dots) \quad (7)$$

This insures convergence of the negotiation, because then the sequence of the sums of the demands of all the e-agents is decreasing." (Ferstenberg US 5,873,071 col.22, lines 6-23), clearly showing the intelligent selection of a subset of data to update the data at the exchange site.

Examiner further notes the terms "bandwidth" and "hardware" do not occur anywhere in the claims of the instant application.

In response to (2), Ferstenberg recites "During the actual intermediated exchange, allocation function 114 first retrieves the previously described stored data, and constructs an in-memory representation of the mathematical programming ("MP")

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optimization problem that is solved to generate intermediary offers. To generate an offer, the intermediary passes this representation to MP library routines, which actually solve the optimization problem. The solution result is then updated in local data area function 113, in order that the exchange results are immediately available for distribution in case the e-agents accept the intermediary offers.” (Ferstenberg US 5,873,071 col.22, lines 6-23) and Wang recites “In another embodiment, this replication of data is performed by splitting off a mirrored copy of each volume of data of the primary host computer 110 that is mirrored to a corresponding volume of data that is accessible to the secondary host computer 120.” (Wang US 6,587,970 B1 col. 13, lines 5-9) and “It should be appreciated that this step of replicating may be performed any time prior to failure or malfunction of the primary host computer 110, and that the present invention is not limited to a replication of all of the data of the primary host computer 110.” (Wang US 6,587,970 B1 col. 13, lines 13-20)

Since each individual element and its function are shown in the prior art, albeit shown in separate references, the difference between the claimed subject matter and the prior art rests not on any individual element or function but in the very combination itself. That is in the combination of mirroring of the whole or a portion of data onto a secondary computer of Wang US 6,587,970 B1 with the updating local, heuristically updated data of Ferstenberg US 5,873,071.

Thus, the simple combination of elements producing a predictable result renders the claim obvious.

Conclusion

5. The following is prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Lumelsky (US 6,463,454 B1) teaches A system providing access to web objects that matches predicted demand for web objects to available capacity on web servers. The system implements methods to dynamically shape both demand and capacity based on certain criteria. The system provides methods to dynamically shape demand for an object based on criteria such as arrival time, incoming geography, and costs requirements. In particular, the present invention characterizes future demand for an object based on aggregation and forecasting of past demand for such object. The system effectively permits control and customization of capacity across one or more media servers based on characteristics associated with the demand across one or more of them, and particularly, based on the dominating geographical traits of past demand.

Bowman-Amuah (US 6,640,244 B1) teaches A system and method are provided for batching logical requests for reducing network traffic. A group of business objects necessary for a transaction are provided and managed in a logical unit of work. Logically-related requests received from the logical unit of work are grouped into a first single network message, and update and retrieval transactions are grouped into a second single network message. The first and second messages are stored, and the

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first message is sent upon receiving an order to send the first message and the second message is sent upon receiving an order to send the second message.

Ofek (US 6,052,797) teaches two data storage systems interconnected by a data link for remote mirroring of data. Each volume of data is configured as local, primary in a remotely mirrored volume pair, or secondary in a remotely mirrored volume pair. Normally, a host computer directly accesses either a local or a primary volume, and data written to a primary volume is automatically sent over the link to a corresponding secondary volume. Each remotely mirrored volume pair can operate in a selected synchronization mode including synchronous, semi-synchronous, adaptive copy--remote write pending, and adaptive copy--disk. Each write request transmitted over the link between the data storage systems includes not only the data for at least one track in the secondary volume to be updated but also the current "invalid track" count for the secondary volume as computed by the data storage system containing the corresponding primary volume.

6. **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE MONTH shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gerald C. Vizvary whose telephone number is 571-270-3268. The examiner can normally be reached on Monday thru Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ella Colbert can be reached on 571-272-6741. The fax phone number for the organization where this application or proceeding is assigned is 571-270-4268.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ella Colbert/
Primary Examiner, Art Unit 3696

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Gerald Vizvary

Patent Examiner, A.U. 3696

October 31, 2008